

H1011

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Leadership Institute
 Applicant Name: Adopt-A-Watershed
 Mailing Address: 731 Market Street, Suite 600A, San Francisco, CA 94103
 Telephone: (415) 541-9657
 Fax: (415) 541-9653

Amount of funding requested: \$ 40,831 for 1 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page __ of the Proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Improvements |
| <input type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input type="checkbox"/> Watershed Planning/Implementation | <input checked="" type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

Indicate the geographic area of your proposal (check only one box):

- | | |
|--|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> Sacramento Tributary: _____ |
| <input type="checkbox"/> Delta | <input type="checkbox"/> East Side Delta Tributary: _____ |
| <input type="checkbox"/> Suisun Marsh and Bay | <input type="checkbox"/> San Joaquin Tributary: _____ |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> Other: _____ |
| <input checked="" type="checkbox"/> Landscape (entire Bay-Delta watershed) | <input type="checkbox"/> North Bay: _____ |

Indicate the primary species which the proposal addresses (check no more than two boxes):

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | |
| <input checked="" type="checkbox"/> Winter-run chinook salmon | <input checked="" type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Migratory birds | |

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

- | | |
|--|--|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input checked="" type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> Planning | <input type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input checked="" type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Kim Stohely
(Signature of Applicant)

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used or use this form for certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK ☐ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK ☐ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2010
 June 1995
 (This form replaces DI-1953, DI-1954,
 DI-1956, DI-1958 and DI-1963)

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Adopt-A-Watershed

731 Market Street, Suite 600A, San Francisco, CA 94103

Check if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

DE-2010
June 1996
(This form replaces DE-1963, DE-1964,
DE-1966, DE-1966 and DE-1963)

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

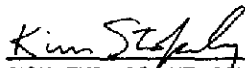
CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.



SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

Kim Stokely, Executive Director

TYPED NAME AND TITLE

DATE 07/02/98

DI-2010
June 1988
(This form replaces DI-1963, DI-1964,
DI-1965, DI-1968 and DI-1963)

Figure 1
Standard Form 424

APPLICATION FOR
FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION: <input type="checkbox"/> Application <input type="checkbox"/> Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction <input type="checkbox"/> Non-Construction		2. DATE SUBMITTED 07/02/98	Applicant Identifier N/A
		3. DATE RECEIVED BY STATE N/A	State Application Identifier N/A
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION			
Legal Name: Adopt-A-Watershed		Organizational Unit	
Address (give only, county, state, and zip code): 731 Market Street, Suite 600A San Francisco, CA 94103		Name and telephone number of person to be contacted on matters involving this application (give area code): Jesse Miller, Associate Director (415) 541-9657	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): 68 - 0365504		7. TYPE OF APPLICANT: (enter appropriate letter in box) <input type="checkbox"/>	
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) <input type="checkbox"/> <input type="checkbox"/> A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify):		A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify)	
9. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE: N/A		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Leadership Institute	
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Bay Delta system			
13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF:	
Start Date 5/99	Ending Date 4/20	a. Applicant 8th District CA	
		b. Project	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
a. Federal	\$ 40,831 .00	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE	
b. Applicant	\$.00	b. NO. <input checked="" type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372	
c. State	\$.00	<input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
d. Local	\$ 20,500 .00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?	
e. Other	\$.00	<input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No	
f. Program Income	\$.00		
g. TOTAL	\$ 61,331 .00		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.			
a. Type Name of Authorized Representative Kim Stokely		b. Title Executive Director	c. Telephone Number (415) 541-9657
d. Signature of Authorized Representative <i>Kim Stokely</i>		e. Date Signed 07/02/98	

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Standard Form 424 (REV. 4-81)
Prescribed by GSA Circular A-102

Figure 2
Standard Form 424A

OMB Approval No. 0348-0044

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.		\$	\$	\$	\$	\$
2.						
3.						
4.						
5. Totals		\$	\$	\$	\$	\$
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories		GRANT PROGRAM FUNCTION OR ACTIVITY				Total (5)
		(3) CAL FED	(4) MATCH	(5)	(6)	
a. Personnel		8,000	4,000			12,000
b. Fringe Benefits		2,000	1,000			3,000
c. Travel		1,880	600			2,480
d. Equipment		600	300			900
e. Supplies		10,750	6,000			16,750
f. Contractual		4,400	2,200			6,800
g. Construction						
h. Other facility		8,450	4,400			12,850
i. Total Direct Charges (sum of 6a-6h)		36,080	18,500			54,580
j. Indirect Charges		4,751	2,000			6,751
k. TOTALS (sum of 6i and 6j)		\$ 40,831	\$ 20,500	\$	\$	\$ 61,331
7. Program Income		\$	\$	\$	\$	\$

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Standard Form 424A (Rev. 4-92)
Prescribed by OMB Circular A-102

1-012560

1-012560

II. Executive Summary

Project Title: Leadership Institute

Applicant Name: Adopt-A-Watershed

How can we best link schools and their communities for the purpose of developing an ethic of stewardship and understanding of the local environment, increasing community participation in conservation efforts, and encouraging skills for making responsible natural resource management choices? The answer lies within the communities themselves, where local educators with proper training and support can lead projects that benefit the Bay-Delta system.

A grant of \$40,831 from the Cal Fed Bay Delta Program, along with \$20,500 in matching funds, will enable five Leadership Teams from the Bay Delta system to attend Adopt-A-Watershed's Leadership Institute. The Leadership Institute introduces a "whole-system" approach, training Leadership Teams made up of two teachers, a community coordinator, and a professor of education from a single community. The Institute consists of a seven-day training in the summer, a four-day follow-up training in the spring, and ongoing support throughout the year. The Institute provides intensive leadership training for the purpose of strengthening existing science-based environmental education programs.

The following objectives are specific to the five Leadership Teams supported by this grant:

- *Participants:* At least 5 school districts and 1 university will send representing participants to the Leadership Institute. A total of 10 teachers, 5 community coordinators, and 1 professor of education will comprise 5 Leadership Teams. Leadership Teams will host 20 Professional Development Workshops and in turn train 600 additional teachers.
- *Students:* At least 15,000 students from a diversity of backgrounds will study with participating teachers.
- *Conservation:* With broad community support, students will lead 100 environmental monitoring and 100 restorations projects that are consistent with the Ecosystem Restoration Program Plan.
- *Partnerships:* Leadership Teams will establish 5 Advisory Committees made-up of local stakeholders including natural resource agencies, businesses, and community groups. The Committees are responsible for identifying conservation efforts that are consistent with the Ecosystem Restoration Program Plan.

Over the past eight years, Adopt-A-Watershed has trained more than 3,000 teachers, 200 community coordinators, and managed \$2 million in federal, state, and local grants. These

accomplishments have been made possible through a collaborative approach which has brought together a broad range of groups.

The following tasks represent key phases in the implementation of the Leadership Institute:

- 1) Adopt-A-Watershed staff and returning Leadership Teams use previous year's evaluation results in planning this year's Leadership Institute. (May 99)
- 2) Adopt-A-Watershed staff and returning Leadership Teams design the Leadership Institute, prepare instructional materials, and select participating Leadership Teams. (June 99)
- 3) Adopt-A-Watershed staff, returning Leadership Teams, and expert consultants deliver a seven-day training in the summer. (August 99)
- 4) Adopt-A-Watershed staff work closely with Leadership Teams to conduct four on-site Professional Development Workshops. (January - March 20)
- 5) Leadership Teams return for a four-day training in the spring, focusing on reflection, assessment, internet data sharing, and planning for next year. (April 20)
- 6) Ongoing support includes availability of Adopt-A-Watershed staff to Leadership Teams for program development advice, joint fund raising efforts, and networking. (Ongoing)

The Leadership Institute was created in response to three interlocking needs:

- The need for a citizenry that understands basic science concepts.
- The need for a citizenry that possesses a sense of stewardship toward the environment.
- The need for training and support to develop teachers into highly skilled educational leaders.

Evaluation is an ongoing process which serves as a navigational device through all phases of the Leadership Institute, allowing for course corrections and continuous improvement. Evaluation does not consist simply of measurements taken at the beginning and end of a project to assess the progress made. Rather, it involves continuous collection, analysis and use of relevant data.

All participants, including students, teachers, and community volunteers, share in the evaluation process. Rubrics, questionnaires, portfolios and other assessment tools are used to measure program implementation accomplishments and challenges, to assess student progress, and to gauge community involvement. Results are compiled and used for continuous improvement of the project.

III. Title Page

Project Title: Leadership Institute

Applicant Name: Adopt-A-Watershed
Kim Stokely, Executive Director
731 Market Street, Suite 600A
San Francisco, CA 94103

phone (415) 541-9657
fax (415) 541-9653
email aaw@dubakella.tcoe.trinity.k12.ca.us

Type of Organization: Non-profit 501 c 3

Tax I.D. Number: 68-0365504

Collaborators: Global Rivers Environmental Education Network(GREEN)
Global Learning and Observations to Benefit the
Environment(GLOBE)

IV. Project Description

Project Description and Approach

Adopt-A-Watershed(AAW) makes school come alive with an integrated, sequential, K-12th grade science curriculum focused on the local environment and emphasizing service in partnership with the community. The curriculum and strategy uses a school's local watershed as a living laboratory in which students and community volunteers lead conservation efforts, making science applicable and relevant to their lives.

Each curriculum unit, 17 in total, addresses grade-level-appropriate science concepts and is designed to conform with the *California State Science Framework*. They are thematically focused with strands covering aquatics/fish, botany, ecosystems, soils/geology, and wildlife. The curriculum units collectively encompass all the natural resource systems and enable students to revisit science concepts in increasing depth over succeeding years.

The strategy is often referred to as a service-learning method. This innovative instructional method provides thoughtfully organized experiences that integrate students' academic learning with service that meets actual community needs. The strategy makes science exciting through long-term environmental monitoring studies, restoration projects, and community education projects, all of which apply concepts learned in the classroom to stewardship of the local environment.

The Leadership Institute is a powerful "train the trainers" model which has operated annually since 1995. It consists of a seven-day training in the summer, a four-day follow-up training in the spring, and ongoing support throughout the year. Participants are trained in Leadership Teams made up of two teachers, a community coordinator, and a professor of education from a single community. Intensive training and support enable Teams to develop strong working relationships and improve leadership skills, all of which helps prepare them as leaders of science-based environmental education. Areas of training include curriculum content, partnership building, field study methodology, planning tools for curriculum integration, curriculum adaptation to local environments, and the theory of student empowerment through service learning.

Leadership Teams are charged with building collaborative partnerships that link schools to their communities. The two teachers implement the AAW program in their own classrooms, and work with the community coordinator to facilitate implementation by other teachers in their school district. The community coordinator brings together local stakeholders including natural resource agencies, businesses, community groups, landowners, and parents to work closely with schools, and provide resources, project guidance, and long-term support to students and teachers. Coordinators match at least one community partner with each teacher, and assemble a variety of partners to form a Local Advisory Committee. The Committee takes responsibility of sustaining the program over the long term.

Adopt-A-Watershed recently launched an initiative to implement pre-service teacher training in the Leadership Institute model. In partnership with the Natural Resources Conservation Service and two 1890 historically black Land Grant Colleges, AAW now seeks to include professors of education as part of the Leadership Teams. The professors help create an ongoing supply of teacher with pre-service preparation in using the AAW program.

The Leadership Institute brings together a powerful combination of elements including summer training, spring follow-up training, and ongoing support:

Summer Training:

- *Partnership Development:* Teams will receive training in how to build effective, collaborative partnerships with local community members, partnerships which will be critical both in implementing the AAW program and ensuring the community's long-term investment in the program.
- *Training in Applied Field Studies:* Teams will learn the methodology of field studies such as soil erosion studies, aquatic insect studies, and water quality testing. They will be trained by scientists and educators in biology, ecology, physics, botany, and geology.
- *Bringing Theory Into Application:* Teams will learn how to take broad scientific concepts and make them relevant to the students' lives by applying them to the local environment.
- *Curriculum Integration and Adaptation:* Through the process of adapting AAW units for use in their regions, the Teams will better understand the program's elements and be able to develop materials relevant to the needs of their students.
- *Student Empowerment Using Service-Learning Strategies:* Teams will be exposed to the power of service-learning as an effective method for empowering students, communities, and drawing a clear connection from core science curriculum to field projects.
- *Leading Edge Pedagogical Models:* Teams will learn to apply principles such as constructivism, grade-level appropriate learning, articulation, addressing multiple learning modalities and culturally diverse learners, and the biological basis of learning.
- *Multicultural Training:* A special program on multicultural perspective in environmental education will help prepare Leadership Teams for the challenges of teaching environmental education in diverse communities. They will learn how to ensure that both curriculum and pedagogy are inclusive and relevant to a diverse group of students.
- *Peer Coaching:* Teams will choose two teachers from their school as partners with whom they will establish individual goals, observe each other teaching, and share feedback and support. Peer coaching will help ensure that all teachers in the program are continuously improving their teaching skills and their ability to implement the AAW program.
- *Technology:* Teams will be trained in accessing AAW's world wide web site, which links AAW classrooms nationwide. The site facilitates each class creating its own

simple home page, and enables classes to share student data, photographs of their watersheds, success stories, etc.

Spring Follow-up Training:

The follow-up training is designed to provide Leadership Teams with time for reflection, assessment, and planning for next year. Teams also find it valuable to learn from one another by presenting implementation successes and challenges. Through this process, Teams strengthen working relationships, improve leadership skills, and reaffirm their commitment to their shared vision.

Ongoing Support:

The ongoing support is designed to make a significant, long-term impact on the communities that the Leadership Teams serve. As Teams return from the Leadership Institute to establish local model programs, AAW provides each Team with four on-site Professional Development Workshops. A Workshop consist of a one-day, professionally facilitated teacher training session, preparing up to 30 teachers to effectively implement the AAW program. Areas of training include curriculum content, field study methodology, curriculum adaptation, and the theory of student empowerment through service-learning. The Workshops are instrumental in helping Teams disseminate the program throughout their school district and region.

Proposed Scope of Work

The following tasks represent key phases in the implementation of the Leadership Institute:

- AAW staff and returning Leadership Teams use previous year's evaluation results in *planning this year's Leadership Institute*. (May 99)
- AAW staff and returning Leadership Teams design the Leadership Institute, prepare instructional materials, and select participating Leadership Teams. (June 99)
- AAW staff, returning Leadership Teams, and expert consultants deliver a 7 day training in the summer. (August 99)
- Trained Leadership Teams work with school administration and staff to develop an implementation plan for each school. (September 99)
- Professors of education and their Team members develop course materials and implement pre-service teacher preparation programs. (September 99)
- Coordinators establish Advisory Committees made-up of local stakeholders. (September 99)
- AAW staff work closely with Leadership Teams to conduct 4 on-site Professional Development Workshops. (January - March 20)
- Leadership Teams mentor teachers new to the program. (January - March 20)
- Coordinators offer training to parents and community volunteers so that they can assist with conservation projects. (January - March 20)
- Coordinators support teachers by organizing conservation projects that integrate with the AAW curriculum. (January - March 20)
- Coordinators develop a data storage system for the school. (January - March 20)

- Leadership Teams return for a 4 day training in the spring, focusing on reflection, assessment, internet data sharing, and planning for next year. (April 20)
- Ongoing support includes availability of AAW to Leadership Teams for program development advice, joint fund raising efforts, and networking. (Ongoing)

Location and/or Geographic Boundaries of the Project

Leadership Teams are selected through a competitive application process which evaluates:

- 1) Consistency with the Ecosystem Restoration Program Plan(ERPP).
- 2) Demonstrated leadership ability.
- 3) School administration support and commitment to science-based environmental education.
- 4) Evidence of local partnerships and community support.
- 5) Capacity to reach minority and low-income audiences.
- 6) Representation of diverse grade levels.

Expected Benefits

Leadership Teams will acquire the skills and tool to implement an integrated, sequential K-12th grade science-based environmental education program. They will become effective education leaders, knowing how to direct students' innate fascination with the natural world into interest in science. Specifically, Teams will possess the ability to link science to the local environment, build collaborative partnerships, and support teachers new to the program.

Students will be inspired with a sense of place in nature and their community, an awareness that they can make a difference, and a lifelong quest for knowledge about the environment. Specifically, students will find new challenges and enjoyment in learning, gain enhanced scientific literacy, and participate in conservation projects that are significant to their community.

Schools and their communities will discover new ways of working together. The AAW program brings communities together, helping their various stakeholders learn to cooperatively address complex local natural resource issues. Specifically, the AAW program provides opportunities to practice and improve skills of collaboration, problem solving, and compromise.

Background and Ecological/Biological/Technical Justification

Californians, within the Bay-Delta system, face an array of complex natural resource issues dealing with water quality, habitat degradation, and ecosystem protection. As we move toward the 21st century, it is clear that achieving widespread environmental literacy is vital to the health of the Bay-Delta system. We desperately need a generation of citizens that understand basic science concepts and possess the critical thinking and information

processing skills that result from sound science education. The Leadership Institute is designed to address the following needs:

- 1) *Environmental Literacy:* The National Report Card on Environmental Knowledge, Attitudes, and Behaviors found that 67% of adult Americans do not have a passing level of understanding of basic environmental information. Specifically on the issue of water quality, Americans were asked, "What is the most common source of water pollution?" 77% of the individuals surveyed could not identify Run Off as the leading cause of water pollution. Most people believe that factories are to blame for water pollution problems. If we hope to promote human behaviors that are sensitive to the environment, we need a generation of citizens that understand the basis of our environmental issues.
- 2) *Environmental Stewardship:* Environmental Experts have predicted that our society has between 20 and 40 years to lean to live sustainably on Earth while meeting the needs of a growing population. Achieving this societal shift will require that we nurture a generation of citizens with an ethic of stewardship toward the environment. When students grasp the core concepts behind environmental issues and develop a sense of connectedness to the local environment, they begin a lifetime of stewardship.
- 3) *Educational Leaders:* The American Academy for the Advancement of Science found that 96% of all elementary school teachers have little or no college level science education and more than 50% felt unprepared to teach science. Few factors have greater impact on student achievement than the ability of teachers to teach well. This statement is supported by the recent Third International Mathematics & Science Study, which ranks the performance of American students 16th out of 21 other nations. We need training and support to develop teachers into highly skilled educational leaders.

Monitoring and Data Evaluation

Evaluation is an ongoing process which serves as a navigational device through all phases of the AAW program, allowing for course corrections and continuous improvement. Evaluation does not consist simply of measurements taken at the beginning and end of a project to assess the progress made. Rather, it involves continuous collection, analysis and use of relevant data.

All AAW participants, including students, teachers, and community volunteers, share in the evaluation process. Rubrics, questionnaires, portfolios and other assessment tools are used to measure program implementation accomplishments and challenges, to assess student progress, and to gauge community involvement. Results are compiled and used for continuous improvement of the program.

An Implementation Rubric is used by Leadership Teams to assess their own progress toward successful implementation of the program. The Rubric illustrates five steps for each program development area including articulation, implementation, and partnerships. For example, one of the development areas is partnership building. Ideally through incremental

steps, the partnership base becomes more diverse and stronger alliances are formed. The Rubric allows communities to place their program on a continuum which defines where they are, where they are going, and where they want to be. Leadership Teams use the Rubric to assess progress and set achievable objectives.

The Leadership Institute provides Teams with the tools to develop a School and Project Portfolio. The purpose of the Portfolio is to document program activities, assess progress toward objectives, reflect on program methods, and showcase results. Many Leadership Teams from previous Leadership Institutes have found their Portfolios helpful in defining objectives and generating greater support from the school system and the wider community.

Questionnaires are used to assess the impact of the program on students and teachers. Teacher questionnaires assess *understanding of science concepts, teaching methods, application of the curriculum to the local environment*; they also authentically assess student learning. Student questionnaires assess *understanding of science concepts, and attitudes toward school, science, the environment, and the community.*

Implementability

The Leadership Institute is carried out in collaboration with other organizations which provide services similar to ours, rather than in competition. Both Global Rivers Environmental Education Network (GREEN) and Global Learning and Observations to Benefit the Environment (GLOBE) send trainers to provide certain components of the Leadership Institute training, and AAW collaborates with both of these organizations in providing follow-up support to Leadership Teams

V. Costs and Schedule to Implement Proposed Project

A grant of \$40,831 from the Cal Fed Bay Delta Program, along with \$20,500 in matching funds, will enable five Leadership Teams from the Bay Delta system to attend Adopt-A-Watershed's Leadership Institute.

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	Overhead and Admin. Fee	Service Contracts	Material	Misc. and Other Dir. Costs	Total
Task 1	50	1,000	144	0	200	398	1,742
Task 2	50	1,000	535	0	4,550	398	6,483
Task 3	150	3,000	8,177	840	2,800	1,194	16,011
Task 4	100	2,000	558	3,200	200	796	6,754
Task 5	100	2,000	4,144	360	800	796	8,100
Task 6	100	1,000	143	0	200	398	1,598
Total	550 hrs	10,000	13,701	4,400	8,750	3,980	\$40,831
Match	275 hrs	5,000	6,900	2,200	4,400	2,000	\$20,500
Total	825 hrs	15,000	20,601	6,600	13,150	5,980	\$61,331
Task 1:	AAW staff and returning Leadership Teams use previous year's evaluation results in planning this year's Leadership Institute. (May 99)						
Task 2:	AAW staff and returning Leadership Teams design the Leadership Institute, prepare instructional materials, and select participating Leadership Teams. (June 99)						
Task 3:	AAW staff, returning Leadership Teams, and expert consultants deliver a 7 day training in the summer. (August 99)						
Task 4:	AAW staff work closely with Leadership Teams to conduct 4 on-site Professional Development Workshops. (January - March 20)						
Task 5:	Leadership Teams return for a 4 day training in the spring, focusing on reflection, assessment, internet data sharing, and planning for next year. (April 20)						
Task 6:	Ongoing support includes availability of AAW to Leadership Teams for program development advice, joint fund raising efforts, and networking. (Ongoing)						

VI. Applicant Qualifications

Adopt-A-Watershed was founded in 1989 by Kim Stokely, an elementary school science teacher in Hayfork, California. She had recognized the unparalleled benefits of collaborative learning by schools and communities. She had also discovered a need for a curriculum which would give students and community members the opportunity to learn science, while doing meaningful work in local watersheds to develop a sense of stewardship toward the environment. With the support of a \$300,000 grant from the Trinity River Task Force, a partnership of 14 Federal, state, local, and tribal organizations, she began developing the first curriculum units.

Over the past eight years, AAW has developed 17 of 27 planned units and trained more than 3,000 teachers and 200 community coordinators. It has managed more than \$2 million in federal, state, and local grants. These accomplishments have been made possible through a collaborative approach which has brought together a broad range of groups.

Adopt-A-Watershed now works with more than 1,500 teachers at over 250 schools, in partnership with more than 400 community organizations, to serve more than 37,500 students a year. To meet increasing nation wide demand, Adopt-A-Watershed has trained 25 Leadership Teams through its Leadership Institute and has expanded its service to 15 new states in the past two years. We expect to establish Leadership Teams in 25 new states in the next five years.

Kim Stokely, founder and director of AAW, will serve as Project Director for the Leadership Institute. She formerly served as Field Studies Director at the Yosemite Institute and Science Coordinator for the Mountain Valley Unified School District. She has extensive experience in developing and implementing successful science and environmental education programs and teacher training workshops. She has designed, planned and facilitated the Leadership Institute since its inception in 1994.

Nancy Jones will serve as Co-Facilitator, along with Kim Stokely, for the leadership training, working full-time for two weeks. Ms. Jones is an independent consultant who specializes in delivering high quality in-service training to elementary school teachers, drawing upon her many years of classroom experience, along with an extensive background in leadership training. She recently won one of three awards given in California by the National Science Foundation for excellence in science teaching.